Docket No. 0512-1319 Appln. No. 10/566,180

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- 1. (original) Acetabular implant of the type comprising a screw type cup which receives an articular insert, the cup having, at the periphery, and in particular in the tropical/equatorial zone (2) thereof, screwing means which are intended to be introduced into the bone material of the acetabulum during the screwing action, the cup carrying a coating which facilitates osteointegration, such as, in particular, a selective calcium hydroxyapatite coating, characterized in that the coating is of the thick type on the convex portions (1, 10) of the outer surface of the cup, including in the zones or troughs or recesses of threads (10) that are left free in the screwing means, whilst that coating has a lesser thickness, or is even absent, on the screw reliefs or threads (11).
- $2. \ \ (\text{original}) \qquad \text{Implant} \quad \text{according} \quad \text{to} \quad \text{claim} \quad 1,$ characterized in that the thickness of the coating of the thick type is from 100 to 200 micrometres.}
- 3. (original) Implant according to claim 2, characterized in that the coating thickness is in the order of 150 ± 35 micrometres.
- 4. (previously presented) Implant according to claim 1, characterized in that the screw reliefs have a coating in the order of 50 \pm 30 micrometres.

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- (previously presented) Implant according to claimcharacterized in that the screw reliefs (11) do not have any coating and have a rough surface.
- 6. (previously presented) Implant according to claim 1, characterized in that the screwing means is arranged in order to traumatize as little as possible the acetabular bone site, in which the threads are introduced, and in order to have a maximum convex surface-area, that is to say, troughs (10) between the sides of threads (11) in order to facilitate, in this region, osteointegration by contact osteogenesis and remodelling under stress, the screw relief being arranged in order to apply a self-tapping cutting effect during the screwing action and an effect involving compression of the sponge-like bone.
- 7. (original) Implant according to claim 6, characterized in that, in a thread pitch, the proportion of the thread width, in the region of the trough, relative to the pitch, is from 0.2 to 0.5.
- 8. (previously presented) Implant according to claim 1, characterized in that the cross-section of the threads is asymmetrical in a diametral plane, with a smaller angle in the order of from 5 to 10° at the polar side (7) of the thread, and a greater angle in the order of from 15 to 20° at the equatorial side (8), in order to bring about a good compression effect when the bone which receives the threading is placed under stress.

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9. (previously presented) Implant according to claim

 characterized in that the crests of threads (11) are relieved, with a leading edge which is radially higher than the remainder of the crest, whose radial height decreases towards the rear of the thread.

- 10. (previously presented) Implant according to claim 1, characterized in that the leading edge is itself inclined, by being formed by a milling pass which is strongly inclined in a biased manner relative to the inclination of the threading itself, the leading edge (12) itself being orientated aggressively forwards relative to the radial.
- 11. (previously presented) Implant according to claim 1, characterized in that the threading pitch is regular in order to bring about a single bone groove, in which successive threads are introduced during the screwing rotation.
- 12. (previously presented) Implant according to claim 1, characterized in that the screwing means has a threading formed by zones of threads (5) which are separated by inclined grooves (6) defining the cutting edges.
- 13. (previously presented) Implant according to claim 1, characterized in that the screwing means has a spherical threading of constant pitch.

14-17. (cancelled)